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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,167	07/30/2003	Gideon Eden	01-1327DIV	7641
7590	03/17/2005		EXAMINER	
James M. Deimen Suite 300 320 N. Main Street Ann Arbor, MI 48104-1192			BEISNER, WILLIAM H	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,167

Applicant(s)

EDEN, GIDEON

Examiner

William H. Beisner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Drawings

1. The drawings were received on 1/3/2005. These drawings are acceptable.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley (US 6,550,347) in view of Hakalehto (WO 9923243).

The reference of Bradley discloses a device (10) for collecting airborne microorganisms. The device includes a container (14) containing an entrapment liquid (44) and an air pump (See column 2, line 64, to column 3, line 2, and column 4, line 39) for transferring an air sample with the microorganisms through the entrapment liquid. With respect to the new claim language that

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the culture container is “disposable”, in the absence of further positively recited structure that would distinguish the container (14) of Bradley over the instantly claimed container, the container (14) of Bradley is capable of being disposed of and is considered to meet the instant claim language.

With respect to claim 1, while the reference of Bradley discloses the capture and detection of microorganisms, the reference recites that the entrapment liquid is removed from the container for subsequent testing (See column 8, lines 25-39). The reference is silent as to the use of a culture liquid as the entrapment liquid.

The reference of Hakalehto discloses that it is known in the art to employ a syringe device for obtaining a sample containing microorganisms. The reference discloses that the sample may be transferred from the syringe to a separate culture for growth and detection (See page 2, lines 20-21). The reference also suggests that the syringe can include a selective nutrient medium to enrich the sampled microorganism immediately after sampling thus avoiding delays associated with inoculation or transfer of the collected sample (See page 4, lines 14-21).

In view of this teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ an entrapment liquid in the device of the references of Bradley that is also an enrichment medium for the collected sample as suggested by the reference of Hakalehto. Use of a culture medium as the entrapment liquid would avoid the delay associated with a subsequent transfer of the sample for further culturing and analysis as done in the reference of Bradley.

With respect to the newly recited “submicron filter” recited in claim 1 “to prevent liquid and solid particulate matter from passing beyond the filter and contaminating the air pump”, the

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reference of Bradley discloses the use of filter (24) for preventing water droplets with entrained particles, contaminants, or air components from exiting the container through outlet (22) (See column 8, lines 9-25). While the reference discloses a filter with a typical pore size of one micron, it would have been obvious to one of ordinary skill in the art to determine the optimum filter pore size, including "sub-micron" pores, based merely on the size of the particles intended to be collected and prevented from exiting the collection system and/or the filter material properties while maintaining the function of preventing water droplets with entrained particles, contaminants, or air components from exiting the container through outlet (22).

With respect to claim 2, the reference of Bradley discloses the use of a vacuum pump (See column 2, line 64, to column 3, line 2, and column 4, line 39).

With respect to claim 3, the use of a pressure pump as opposed to an air pump would have been obvious to one of ordinary skill in the art for the known and expected result of providing an alternative means recognized in the art for generating the required air flow in the sampling device.

With respect to claims 4-9, the reference of Hakalehto discloses the use of culture medium that allows for optical detection of microorganism presence within the sampling container (See page 6, lines 16-22). The specifics of the culture medium and detecting agents employed would have obvious to one of ordinary skill in the art at the time the invention was made based merely on the specifics of the microorganism to be detected.

With respect to claim 10, anthrax is a notoriously well known airborne microorganism and thus would have been well within the purview of one of ordinary skill to detect this

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microorganism using known culture medium and detection reagents capable of indicating the presence of anthrax in the sampled air.

Response to Arguments

4. Applicant's arguments filed 1/3/2005 have been fully considered but they are not persuasive.

With respect to the rejection of claims 1-10 over the combination of Bradley in view of Hakalehto, Applicant argues that the combination is deficient because neither of the references discloses or suggests the use of a submicron filter to prevent contamination of the air pump. Applicant stresses that the reference of Bradley merely discloses the use of a hydrophobic filter to prevent the passage of liquid and the reference of Hakalehto does not utilize an air pump or filter.

In response, the Examiner is of the position that the filter of Bradley does more than prevent passage of liquid. The reference discloses that the filter is intended to prevent particulates and contaminants from exiting the container (See column 8, lines 14-19). As recited in the 35 USC 103 rejection set forth above, while the preferred filter includes pores of one micron, it would have been obvious to one of ordinary skill in the art to determine the optimum pore size, including "sub-micron" pores, of the filter based on the size of the particulates and contaminants that are intended to be maintained within the sample container.

Conclusion

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269.

The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Beisner
Primary Examiner
Art Unit 1744

WHB